507004887 12/02/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7051724

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANASTASIOS JOHN HART	01/12/2021
RYAN WADE PENNY	01/10/2021

RECEIVING PARTY DATA

Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Street Address:	77 MASSACHUSETTS AVENUE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16513700

CORRESPONDENCE DATA

Fax Number: (617)316-5311

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 6173165310

Email: docket-IN@btlaw.com

Correspondent Name: **BARNES & THORNBURG LLP** Address Line 1: 11 S. MERIDIAN STREET

Address Line 4: INDIANAPOLIS, INDIANA 46204

ATTORNEY DOCKET NUMBER:	MIT 20748 88212-344382
NAME OF SUBMITTER:	RORY P. PHEIFFER
SIGNATURE:	/Rory P. Pheiffer/
DATE SIGNED:	12/02/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

source=88212-344382 - Executed Declaration and Assignment (Hart)#page1.tif source=88212-344382 - Executed Declaration and Assignment (Hart)#page2.tif source=88212.344382 - Executed Declaration and Assignment (Penny)#page1.tif source=88212.344382 - Executed Declaration and Assignment (Penny)#page2.tif

PATENT REEL: 058264 FRAME: 0950 507004887

Attorney Docket No.: 88<u>212-344382 (MIT 20748)</u> U.S. Application No.: 16/513,700

	U.S. Application No.: <u>16/513, 700</u>
COMBINEI	DECLARATION AND ASSIGNMENT
Title of Invention: <u>ADDITIVE MANUFACTUR</u>	NG VIA OPTICAL APERTURE DIVISION MULTIPLEXING
This declaration and assignment is directed to:	
	The attached or filed herewith application of (list of named inventors),
0r	
	The United States application or PCT international application number <u>16/513,700</u> filed on <u>July 16, 2019</u> .
Declaration	
As the below named inventor, I hereby de	clare that:
The above-identified application ("Applic	ation") was made or authorized by me.
I believe that I am the original inventor or	an original inventor of a claimed invention or discovery in the Application.
	ents of the Application, including the claims, and I acknowledge the duty to disclose fined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of this
	se statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or oth for filings of this Application in the United States of America.
Assignment MASSAC	CHUSETTS INSTITUTE OF TECHNOLOGY 77 Massachusetts Avenue Cambridge, Massachusetts 02139
a university organ	nized under and pursuant to the laws of Massachusetts.
(he	reinafter designated as the "Assignee"),
transferred to Assignee my entire right, title, and it arising therefrom and the right to claim priority to Patent of the United States, European Patent Office any of them, all such inventions or discoveries and and continuations thereof, and to all Letters Patent supplementary protection certificates, reexamination	necy of which is acknowledged, I hereby assign and transfer and/or have assigned and atterest in, to, and under the Application, including all priority rights for other countries the Application, all inventions or discoveries therein disclosed, and any and all Letters e and of all other countries, which may be granted for such inventions or discoveries, or all rights in such Application including any and all provisionals, substitutions, divisions, that may be granted for said inventions and discoveries, and in and to all extensions, ons, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use for which such Letters Patent may be granted, as fully and entirely as the same would ment and sale not been made.

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PATENT REEL: 058264 FRAME: 0951

Attorney Docket No.: 88212-344382 (MIT 20748)

U.S. Application No.: 16/513,700

I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other patent offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reissue applications thereof, any reexamination of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.

LEGAL NAME OF INVENTOR: Anastasios John Hart

Signature Signature	January 12, 2021 Date
	Address: 57 Devonshire Road Waban, Massachusetts 024
	Citizenship: United States of America Text
Witness #1 Name Justin Silva	
Witness Signature Justin Silva	Date January 12, 2021
Witness Address: 69 Carter Street, Brockton, Mas	achusetts 02302
Witness #2 Name Mariah Tato	
Witness Signature Mato	Date January 12, 2021
Witness Address: 69 Carter Street, Brockton, Mas	eachusetts 02302
5033519.1	
	Page 2 of 2

PATENT

REEL: 058264 FRAME: 0952

Attorney Docket No. 88212-344382 (MIT 20748)

U.S. Application No. 16/513.700

COMBINED DECLARATION AND ASSIGNMENT

		8																											

This declaration and assignment is directed to

The attached or filed herewith application of (list of named inventors)

or.

The United States application or PCT international application number 16/513/30 filed on July 15/2019

Declaration

As the below carried inventor, I bereby declare that

The above-dentified application ("Application") was made or authorized by me

I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application.

I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose enformation which is necessal to parentability as defined in Table 17, the United States Code of Federal Regulations, \$1.56 for fillings of this Application in the Entitled States of America.

I hereby acknowledge that any will build determine made in this declaration is provided to under 18 U.S.C. § 1801 by Fine or Improvement of not more than her CV years or both for Filings of the Application in the United States of America

Assignment

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

77 Massichuseus Avenue Cambridge, Massachuseus (C.139

a university organized under and pursuant to the taws of Massachusetts.

(hereinafter designated as the "Assignce"),

For good and valuable consideration, the sufficiency of which is acknowledged. I hereby assign and transfer and/or have assigned and transferred to Assignee my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States. European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

Page I of 2

Attomey Docket No., 88212-344382 (MIT 20748)

Ushall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other papers offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reinsue applications thereof, any recommission of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications, and also no execute separate assignments in connection with such applications as the Assignee may deem necessary of expection.

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or ressue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to yest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any recognition of any of such applications, to Assigned, and (ii) government that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.

LEGAL NAME OF INVENTOR: Ryan Wade Penny Signature	01/10/2021 Rf
	Address: 109 Henry Street, Apartment 2 Cambridge, Massachusetts 02139
	Citizenship: United States of America
Witness #1 Name <u>Margaret Dowst</u> Witness Signature <u>1 < 3</u> Witness Address: <u>IS Sanborn Ave Apt Somerville,</u>	Date <u>0[/10/202]</u> MA 02143
Witness #2 Name	
Witness Signature	Date
Witness Address:	
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RECORDED: 12/02/2021